[redacted]

Uniplex
CORPORATION

February 24, 1994

Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Re: NPRM • Docket No. 93-61

Summary

Uniplex is a small business founded by principals that have extensive backgrounds in the security alarm field. We are a manufacturer of Part 15 spread spectrum radios licensed and operating in the 902-928 Mhz band. In addition we have developed and intend to deploy an AVM/LMS system based upon our spread spectrum technology as our pending licenses issue.

We urge the Commission to take the AVM/LMS industry seriously in its rule making process. The foresight of the Commission in establishing interim AVM rules has had the desired effect of encouraging U.S. innovation and investment in the technology. In addition to promising new services that benefit the public, the economy will likely benefit from the export potential of this U.S. led technology.

In this document we wish to express three points for the Commission to consider:

1) The point made by some parties in this proceeding indicating that GPS technology can provide the services contemplated by AVM/LMS is not true. The technology that we and others have developed using a terrestrial location infrastructure can potentially provide services that are very much in the public interest and can not be effectively addressed by GPS technology.

2) The AVM/LMS service is still a high risk emerging industry which will require continued innovation in technology and marketing before it gains widespread acceptance like cellular phones have and PCS services are expected to. If the Commission were to decide to move the AVM/LMS allocation to new spectrum that falls under the auction process, small innovative companies like ourselves would probably not be able to participate and would suffer substantial financial loss.

3) We regard the Pactel proposal that puts forth specific suggestions toward the resolution of conflicts between users of the 902-928 Mhz band as a constructive step. We believe, however, it constrains technological innovation and creates unnecessary enforcement issues. We outline some alternatives.

2905 COUNTRY DRIVE • ST. PAUL, MN 55117 • 612/490-1936 • FAX 612/490-0495

Discussion

1. In the matter of GPS based systems being equated to AVM/LMS systems.

Although it is true that GPS receivers are priced in the several hundred dollar range and GPS coverage is worldwide, implementation of a useable vehicle based system in an urban environment is costly and cumbersome compared to AVM/LMS. First, GPS is a receive only system capable of providing navigation fixes to the vehicle but requires some sort of communications sub-system to provide location information to the remote dispatcher or fleet operator. Secondly, in order to obtain accurate fixes GPS systems may require a third sub-system that communicates to a terrestrial differential correction station. Additionally some GPS systems employ a dead reckoning sub-system to interpolate position between fixes which are frequently lost due to signal obstruction from trees or buildings.

In contrast AVM/LMS systems can potentially provide accurate remote position and communications in the same system at significantly lower hardware and installation expense. Further, the need to mount GPS antennas on a vehicle rooftop to provide the best "view"of the satellite constellation invites attack in security applications which may be the leading applications of vehicle location technology.

Given the above contrast between GPS and AVM/LMS systems it would be hard to imagine how GPS technology could evolve to provide location and tracking of individuals wearing transmitters as we believe to be feasible using simpler AVM/LMS technology. Such personal tracking services could potentially revolutionize the penal system, provide a metropolitan wide personal emergency service and track lost children and alzhiemers patients.

2. In the matter of re-locating AVM/LMS to spectrum available on an auction basis.

We ask that the Commission recognize that AVM/LMS services are an early stage emerging business segment which requires further technical and marketing innovation and system integration before it will win acceptance to a profitable level. Perhaps this is best illustrated by the case of Teletrac who began offering AVM services in 1991 and appears to be the leading provider at this time. Quoting from a PacTel Corporation prospectus dated December 2, 1993 (Exhibit 1) "Teletrac is in the start-up phase of its operations and to date its services have not achieved a significant degree of commercial acceptance. Teletrac reported net losses before taxes of $49.1 million, $36.8 million, $12.7 million and $33.3 million during 1992, 1991, 1990 and the nine months ended September 30, 1993." We presume that capital expenditures required to build the network infrastructure for the six markets currently served by Teletrac are not reflected in these figures.

In contrast, Uniplex has developed its AVM system for less than $2 million and plans beta deployment within a month. We submit that the additional financial burden caused by moving the AVM/LMS allocation to spectrum that would only be available through the auction process would create a very tilted playing field virtually excluding small innovative companies like ours and cause severe financial hardship for us.

3. In the matter of the Pactel Teletrac proposal.

Bandwidth and band sharing. Pactel has suggested that the total bandwidth allocated to two users in a market be 10.5 Mhz instead of the present 16.5 Mhz (considering the .25 Mhz "narrow band" forward links). We believe that a concession of this nature could favorably impact the Part 15 and AVI users of the band without seriously degrading LMS if properly implemented.

One of the problems with the Pactel proposal is that it is specifically tailored to a technology that is not compatible with ours or, to the best of our knowledge, any of the other companies that have developed newer AVM technologies. Adoption of such a technologically specific standard would favor Pactel and have devastating financial consequences on companies such as ours who would have to go "back to the drawing board" while Pactel would be in a position to secure channel protection by building networks around its current technology. In addition, such a narrow technical standard constrains innovative technological advances which will otherwise likely evolve to better serve future market needs.

A further problem with the proposal is the sharing concept. This and the frequency allocation issue both appear to be very specific to the Pactel technology. Adoption of such a proposal would not only be devastating to our efforts but would create an enforcement burden on the Commission.

We believe that a better compromise in the interests of other users of the band is to shrink the existing two 8 Mhz bands to 5 Mhz each and not authorize any further "forward links" outside of these bands. This would result in even more free spectrum for other users than the Pactel proposal would because it would eliminate, potentially, .5 Mhz of forward link allocations which we don't believe are authorized in 90.239 anyway. It would seem that Pactel could accommodate their forward link on a shared basis within their 5 Mhz allocation more easily than they could accommodate another shared user. From our perspective we would prefer the lower bandwidth without the burden and constraints imposed by a sharing scheme.

If few technical restrictions are placed on the use of the 5 Mhz allocations, multiple technical approaches can compete and evolve in the marketplace without additional burdensome actions by the Commission. We would suggest the frequencies 904-909 Mhz and 921-926 Mhz which leaves a contiguous 12 Mhz for Part 15 users.

Transmitter classification and power limitations. Again, we find Pactel's classification of its transmitters technology specific and narrow. We suggest that licensed fixed transmitters be permitted 300 watts ERP and mobiles 30 watts ERP.

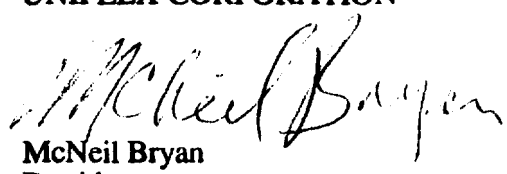
Implementation requirements. Pactel proposes criteria that would provide channel protection that includes the requirement that 1,500 mobiles be on the system but does not specify a timetable. In our judgement that could take as long as two years with a reasonable marketing effort in a modest sized market. The Pactel prospectus dated December 2, 1993 indicates Teletrac has only 27,000 units in service as of September 30, 1993 in the six large markets it serves despite operating expenses exceeding $100 million over more than three years. The question raised is what happens between 0 and 1500 mobiles?

The issue of how to provide equitable access to spectrum to those of us who have invested in the development of technology under the existing rules seems to us to be the most difficult issue that the Commission should resolve. We ask, that in your deliberations, you

consider the extended construction times granted early licensees as well as engineering delays that some of us may incur if technical requirements are changed by this proceeding.

Respectfully Submitted,

UNIPLEX CORPORATION



McNeil Bryan
President

Exhibit 1

Prospectus

60,000,000 Shares

PacTel Corporation

Common Stock

PacTel Corporation (the "Company") is offering 60,000,000 shares of Common Stock, par value $.01 per share (the "Common Stock"), in concurrent offerings (collectively, the "Offerings") in the United States and Canada by the U.S. Underwriters (the "U.S. Offering"), in Europe by the European Managers (the "European Offering") and in Asia by the Asian Managers (the "Asian Offering"). Of the 60,000,000 shares offered hereby, 42,000,000 shares are offered initially in the U.S. Offering, 13,500,000 shares are offered initially in the European Offering and 4,500,000 shares are offered initially in the Asian Offering, subject to transfers among the U.S. Underwriters, the European Managers and the Asian Managers (collectively, the "Underwriters"). Before the Offerings, there has been no public market for the Common Stock. See "Underwriting—Determination of the Offering Price" for a discussion of the factors considered in determining the initial public offering price.

Prior to the Offerings, Pacific Telesis Group ("Telesis") will own, directly or indirectly, 100% of the outstanding shares of Common Stock of the Company. Telesis has announced that, subject to final approval by its Board of Directors, Telesis intends to distribute to its shareowners all of the Common Stock of the Company owned by Telesis (the "Spin-off"). Telesis currently anticipates that such distribution will occur within six months after the closing of the Offerings. See "Investment Considerations—Relationship Between the Company and Telesis." After completion of the Offerings and prior to the planned Spin-off, Telesis will own approximately 88% of the total number of outstanding shares of Common Stock of the Company (approximately 86% if the over-allotment options referred to below are exercised in full).

Up to 5,000,000 shares are being reserved for sale to officers, directors, prospective directors and employees of the Company, Telesis and certain of Telesis' subsidiaries and partnerships at the initial public offering price.

The Common Stock has been approved for listing on the New York Stock Exchange upon notice of issuance under the symbol PTW.

See "Investment Considerations" for certain information that should be considered by prospective purchasers of the Common Stock offered hereby.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Price to Public	Underwriting Discount	Proceeds to Company(1)
Per Share	$23.00	$1.15	$21.85
Total(2)	$1,380,000,000	$69,000,000	$1,311,000,000

(1) Before deducting expenses payable by the Company estimated to be $4,620,000.
(2) The Company has granted to the Underwriters 30-day options to purchase up to an aggregate of 8,500,000 additional shares of Common Stock at the Price to Public less the Underwriting Discount to cover over-allotments, if any. If such options are exercised in full, the total Price to Public, Underwriting Discount, and Proceeds to Company will be $1,575,500,000, $78,775,000 and $1,496,725,000, respectively. See "Underwriting."

Joint Global Coordinators

Lehman Brothers **Salomon Brothers Inc**

The shares of Common Stock are offered subject to receipt and acceptance by the Underwriters, to prior sale, and to their right to reject any order in whole or in part and to withdraw, cancel or modify the offer without notice. It is expected that delivery of the shares will be made in New York, New York, or through the facilities of The Depository Trust Company, on or about December 9, 1993.

Salomon Brothers Inc **Lehman Brothers**

Goldman, Sachs & Co. **Merrill Lynch & Co.**

CS First Boston

Donaldson, Lufkin & Jenrette
Securities Corporation

Morgan Stanley & Co.
Incorporated

The date of this Prospectus is December 2, 1993.

Cellular services revenues were $603.3 million during the nine months ended September 30, 1993, a 21.5% increase over the first nine months of 1992. The increase in revenues in the 1993 period was primarily a result of domestic subscriber growth. The Company is using the equity method to account for its interest in the PacTel-McCaw Partnership, which was formed on September 1, 1993. As a result, the revenues from the Company's San Francisco and San Jose markets are not reflected in the Company's consolidated cellular services revenues after September 1, 1993. If the PacTel-McCaw Partnership had closed on January 1, 1993, the Company's pro forma cellular services revenues for the nine months ended September 30, 1993 would have been $451.5 million. See "Selected Consolidated Financial and Pro Forma Data - Pro Forma Condensed Combined Statements of Income Data" and PacTel Corporation and Subsidiaries Pro Forma Condensed Combined Financial Statements.

Paging Services. Paging services revenues primarily consist of paging service charges and rentals of paging units in the United States and, to a small extent, Thailand. Paging services revenues increased 20.3% in 1992 and 15.4% in 1991, as compared to the previous year. Such increases in paging services revenues primarily resulted from 36.6% and 26.8% increases in the number of domestic paging units in service in 1992 and 1991, respectively, as compared to the previous year. The increases in domestic paging units in service reflect increased penetration in existing markets primarily through successful retail and reseller pager sales programs and the establishment of new paging operations. The effect of such growth in paging units in service was offset in part by a slight decrease in the average revenue per paging unit in service.

Paging services revenues increased by 25.9% during the first nine months of 1993 as compared to the same period in the prior year primarily as a result of domestic customer growth. The number of domestic paging units in service increased by 39.3% during the one-year period ended September 30, 1993.

Vehicle Location Services. Vehicle location services revenues from Teletrac primarily consist of charges on corporate fleet tracking and stolen vehicle tracking services. Teletrac's vehicle location business is in the start-up phase and its services have not yet achieved a significant degree of commercial acceptance. Teletrac initiated operations in Los Angeles, Chicago, Detroit and Dallas/Fort Worth in 1991 and in Miami and Houston in 1992. Teletrac's vehicle location services revenues were $0.7 million in 1991, $2.4 million in 1992 and $2.8 million in the first nine months of 1993.

Product Sales and Other Revenues. Product sales and other revenues primarily consist of revenues from sales and rentals of cellular telephones, sales of paging and vehicle location units, and installation charges. The increase in product sales and other revenues in the first nine months of 1993 and in 1992 and 1991 is attributable to increases in sales of paging equipment and, to a lesser extent, sales and rentals of cellular telephones. The Company sells cellular telephones and paging units approximately at cost. Such costs are included in Cost of revenues.

Operating Expenses. The following table sets forth the components of the Company's operating expenses for each of the last three years and for the nine months ended September 30, 1993 and 1992.

	Year Ended December 31,			Nine Months Ended September 30,	
	1992	1991	1990	1993	1992
			(In millions)		
Operating Expenses					
Cost of revenues	$174.4	$138.4	$118.2	$158.5	$128.5
Selling and customer operations expenses	262.9	201.5	159.7	210.1	184.2
General, administrative and other expenses	203.6	174.6	145.0	183.3	150.0
Depreciation and amortization	143.4	130.0	110.0	129.9	104.7
Total operating expenses	$784.3	$644.5	$532.9	$681.8	$567.4

In August 1993, the United States government enacted the Omnibus Budget Reconciliation Act of 1993, which incorporates new business tax provisions. These include an increase in the corporate tax rate from 34% to 35% retroactive to January 1, 1993. The Company's adjustment for the change in tax rate reduced net income by approximately $4.7 million in the third quarter of 1993.

Income (Loss) Before Extraordinary Item and Cumulative Effects of Accounting Changes. The Company reported income (loss) before extraordinary item and cumulative effects of accounting changes of $(10.1) million, $43.1 million (which included a $26.0 million pre-tax gain on the sale of wireless interests) and $50.0 million for 1992, 1991 and 1990, respectively. The decline in income over such three year period was primarily the result of increasing start-up losses from the Company's international wireless ventures, interest expenses related to the Company's international investments, expenses associated with the Company's international license applications and operating losses from Teletrac.

Teletrac (including ITS) reported pre-tax losses of $49.1 million, $36.8 million, $12.7 million and $33.3 million during 1992, 1991 and 1990 and the nine months ended September 30, 1993, respectively. The Company does not expect Teletrac's operations to be profitable for several years and does not intend to expand Teletrac's operations significantly until its services achieve a higher level of commercial acceptance. The Company is continuously evaluating and considering other commercial applications of its technology and radio location spectrum.

The Company is currently pursuing opportunities to expand its wireless operations in international markets and intends to participate actively in the license application process for PCS in the United States. To the extent that the Company is successful in its pursuit of new wireless licenses, the Company will incur start-up expenses which, at least in the short-term, will have a dilutive effect on the Company's future earnings.

Extraordinary Item. The extraordinary item recorded by the Company in 1992 is the result of a $12.7 million early redemption expense related to the refinancing of $100 million of long-term debt. The debt was retired with short term funding provided by PTCR. See Note G to the Consolidated Financial Statements of PacTel Corporation and Subsidiaries.

the digital paging system was operational in 14 cities, including Madrid, Barcelona and Seville. Sistelcom-Telemensaje offers tone-only, numeric and alphanumeric paging services. At September 30, 1993, Sistelcom-Telemensaje had approximately 11,500 subscribers. Commercial service is expected to be available in all of Spain's major cities by 1994. The license requires that all provincial capitals and all cities with a population of greater than 150,000 be covered by September 1994.

Thailand. The Company provides nationwide paging service in Thailand through a 49% interest in PerCom Service Limited ("PerCom"), which has served all of Thailand's major population centers since February 1991, and through a wholly owned subsidiary that has provided service in Bangkok since 1987. These companies operate together under the name PacLink™ and jointly served approximately 94,000 subscribers at September 30, 1993. PerCom is obligated under its license to pay between 25% and 40% of its annual paging revenues to the Communications Authority of Thailand ("CAT") during the fifteen-year term of the license, with guaranteed payments of approximately $57 million over such period, of which approximately $3.1 million had been paid as of September, 1993. Under the Bangkok paging license, the Company is obligated to pay 33% of its annual paging revenues to CAT, with guaranteed payments of at least $14.6 million required during the remaining term of the license.

France. In September 1993, the French government awarded one of three national digital paging licenses to Omnicom, a joint venture in which the Company has an 18.5% interest. The Company's principal partners in Omnicom are Bouygues S.A. and Société Générale. Omnicom plans to add more partners in the future. Omnicom will construct and operate a nationwide digital paging network based on ERMES, the European radio messaging standard, and expects to begin service in Paris by October 1994. The license requires that 20% of the population be covered by the end of 1994 and 60% by the end of 1999.

Other Services

PacTel Teletrac

The Company, through its subsidiary Location Technologies, Inc. ("LTI"), has a 51% interest in Teletrac, a partnership that offers vehicle location services. Teletrac currently has operations in Los Angeles, Detroit, Chicago, Dallas/Fort Worth, Houston and Miami, and has licenses to operate in more than 100 additional cities. The Los Angeles system, the first to commence commercial operations, began offering such services in January 1991.

Teletrac is in the start-up phase of its operations and to date its services have not achieved a significant degree of commercial acceptance. Teletrac reported net losses before taxes of $49.1 million, $36.8 million, $12.7 million and $33.3 million during 1992, 1991, 1990 and the nine months ended September 30, 1993, respectively. The Company does not expect Teletrac's operations to be profitable for several years. The Company intends to take actions to reduce Teletrac's operating losses and does not plan to expand Teletrac's operations significantly until its services achieve a higher level of commercial acceptance. The Company is exploring various opportunities to expand the market for Teletrac's services and is continuously evaluating and considering other commercial applications of its technology and radio location spectrum.

Technology. Teletrac locates vehicles through the precise calculation of the time a radio signal takes to travel from a vehicle equipped with a Teletrac vehicle location unit ("VLU") to Teletrac's land-based receiver stations. Teletrac's proprietary software automatically determines the vehicle's location based on the time the signal arrives at each station, the geographic relationship between the stations, and the speed at which the signal travels. This location is then displayed on a computer-generated map. This process takes only seconds and is generally accurate to within 100 feet, depending on building obstruction, vehicle direction and radio wave interference.

Products and Services. Teletrac offers two primary services: fleet tracking and stolen vehicle location. Fleet tracking allows subscribers to monitor the location of all of their vehicles equipped with VLUs, such as taxicabs, ambulances, municipal buses and intra-city delivery trucks. A subscriber may

use the fleet tracking service to determine, for example, which vehicle is closest to a customer or whether a vehicle is deviating from its route. In addition, an alert button located in the vehicle allows a driver to signal an emergency. Teletrac had approximately 19,500 fleet tracking units in service at September 30, 1993. Teletrac's stolen vehicle location service is automatically triggered when a car alarm connected to a VLU is not deactivated within a short time after being triggered. The VLU will automatically broadcast a signal that will appear on Teletrac's monitors. Teletrac personnel will simultaneously attempt to contact the owner of the car and the police. Teletrac provides the police with information such as the model and license number of the car, as well as its location. The Company also is in the process of introducing an emergency roadside assistance program for subscribers of its stolen vehicle location service. Teletrac had approximately 6,400 stolen vehicle location units in service at September 30, 1993.

Marketing. Teletrac's fleet tracking service is marketed through a direct sales force located in the individual markets served, and, for national accounts, through a sales group located in Los Angeles. Teletrac sells the VLUs used for fleet tracking directly to the purchaser of the service at negotiated prices, and charges a monthly fee of between $20 and $30 per month based on system usage. Teletrac's stolen vehicle location service is marketed by distributors of VLUs, such as automobile and electronics dealerships who purchase them directly from manufacturers. Teletrac is not involved in the sale of such units. Once a customer has purchased a unit, Teletrac receives an activation fee of approximately $50 and a $15 monthly service fee thereafter.

Competition. In fleet tracking, Teletrac's competitors include satellite services and traditional fleet management services, such as specialized mobile radio, which allows a driver to communicate with a dispatcher. In the stolen vehicle location market, a competitor that uses a different technology began to offer service in several major cities prior to Teletrac, and competes directly with Teletrac in most of its markets.

Joint Venture. The Company, through LTI, currently owns 51% of Teletrac. North American Teletrac ("NAT") (the other partner in Teletrac) owns, directly or indirectly, 49%. Prior to March 31, 1995, and if certain conditions have been fulfilled, LTI and NAT may each elect to cause a combination of NAT and LTI. In the combination, the shareholders of LTI and NAT would receive stock in the combined entity in an amount reflecting their indirect interest in Teletrac. The shareholders of NAT may also elect to have the combined entity register its shares in an initial public offering (the "LTI IPO"). The LTI IPO must generally occur prior to March 31, 1995.

The Company and its affiliates have the right, but not the obligation, to provide capital to Teletrac or the combined entity using convertible notes, prior to the earlier of March 31, 1995 or the LTI IPO. If the Company's affiliates do not purchase such notes, funds may be sought from other sources (subject to certain restrictions). Teletrac also guaranteed a $49.5 million debt of NAT's subsidiary, and affiliates of the Company have issued letters of responsibility supporting that guarantee.

Convertible securities may only be converted after the earlier of the LTI IPO or March 31, 1995. If converted within two years after that date, the conversion rate will generally be fifty percent of the price at which stock was sold in the LTI IPO (or, if the LTI IPO did not occur, an appraised price). The Company may not convert during that two-year period to the extent the conversion would result in the Company owning more than 70 percent of the company. After that time, the conversion rate will equal the LTI IPO price until another limitation, based on a 1:9 relative ownership ratio between the former NAT shareholders and the Company, is reached. Thereafter, the conversion rate will equal the fair market value of the shares.

Long Distance

The Company presently holds a 10% interest in International Digital Communications ("IDC"). IDC provides long-distance telephone service between Japan and over 60 countries, including the United States, to business and residential customers. IDC also offers private leased circuit services within

E. Joint Ventures and Acquisitions (Continued)

The Company has the opportunity to evaluate up to three different appraisal values during the 18-month period beginning in August 1996, prior to determining whether to cause the Redemption. The Company will finance the Redemption by providing to CCI any necessary funds.

In the event that the Company does not exercise its right to cause the Redemption, CCI is obligated to promptly commence a process to sell itself (and, if directed by the Company, the Company's interest in the PacTel-CCI Partnership). In the event that the Company does not direct CCI to sell the Company's interest in the PacTel-CCI Partnership such partnership dissolves and the assets are returned to the contributing partner. CCI may, in the alternative, purchase the Company's interest in CCI or CCI and the PacTel-CCI Partnership, as the case may be, at a price based upon their appraised values determined in accordance with the Merger Agreement. If CCI or its interest in the PacTel-CCI Partnership is sold within certain specified time periods not to exceed two years for a price less than the appraised private market value, the Company is obligated to pay to each other CCI stockholder a specified percentage of such shortfall.

In connection with the CCI transaction, Telesis delivered a letter of responsibility in which it agreed, among other things, to continue to own a controlling interest in the Company. Telesis and CCI have agreed to the termination of such letter of responsibility at the time that Telesis no longer has a controlling interest in the Company in exchange for the provision by the Company of substitute credit assurance, consisting of a $600.0 million letter of credit and a pledge of up to 15% of CCI's shares on a fully diluted basis, for the Company's obligations in connection with the MRO and for the payment of any make-whole obligation, respectively.

McCaw Cellular Communications, Inc.

In September 1993, the Company and McCaw Cellular Communications, Inc. ("McCaw") contributed their respective cellular operations in San Francisco, San Jose, Dallas, Kansas City (Missouri/Kansas) and certain adjoining areas to a joint venture with equal ownership by each company. The new venture (the "PacTel McCaw Partnership") will manage two large cellular regional networks covering an estimated population of 9.2 million people. (The Company currently has operations covering an estimated population of 4.5 million people in the joint venture service area.) In a related transaction, the Company purchased McCaw's Wichita and Topeka systems for $100.0 million. (See the Pro Forma Condensed Combined Financial Statements included as an exhibit to these financial statements, incorporating the PacTel-McCaw Partnership and the purchase of McCaw's Wichita and Topeka systems.)

PacTel Teletrac

PacTel Teletrac ("Teletrac"), a start-up company offering vehicle location services in six markets in the United States, is 51% owned by the Company, and thus its operations are consolidated with the Company. Effective March 31, 1992, Teletrac exercised its option to acquire all of the assets of International Teletrac Systems ("ITS"). The acquisition price was $9.5 million to be paid over two years and the creation of a $69.7 million "preferred capital account" for the benefit of ITS, which Teletrac accounts for as long-term debt. This amount has been netted with a $20.2 million receivable from ITS and is reflected as $49.5 million long-term debt in the Consolidated Balance Sheets (see Note G). Additionally, the Company's 49% partner in Teletrac provided ITS with a 24% ownership interest in Teletrac, and, as a part of the purchase agreement, Teletrac credited ITS' capital account $2.5 million.

E. Joint Ventures and Acquisitions (Continued)

Prior to the March 31, 1992 acquisition of ITS' assets, Teletrac had no ownership interest in ITS. However, the Company had an obligation through Teletrac to ITS' lender, who had funded the substantial operating losses of ITS. Because of this obligation, Teletrac has consolidated ITS for all periods presented.

As of December 31, 1992, the Company had advanced Teletrac $79.5 million for ongoing operating expenses. Teletrac pays interest quarterly at Wells Fargo's prime rate plus 2%. Advances issued prior to May 29, 1992 have a three-year term with an option to extend for up to an additional five years. Advances issued after May 29, 1992 have a six-year term. The Company can convert the advances into additional equity interests in Teletrac or Teletrac's corporate successor. The conversion rate may be based on an appraised price or a percentage of the price of stock issued in an initial public offering for Teletrac's corporate successor. Such initial public offering, which may be solely elected by the shareholders of the minority partner of Teletrac, must generally occur prior to March 31, 1995.

F. Intangible Assets

Intangible assets consist of the following (dollars in millions):

	December 31,	
	1992	1991
FCC licenses, at cost, less accumulated amortization of $26.8 and $21.8 for 1992 and 1991, respectively	$163.8	$168.2
Goodwill, at cost, less accumulated amortization of $8.0 and $6.5 for 1992 and 1991, respectively	45.9	36.4
Other intangible assets, at cost, less accumulated amortization of $20.3 and $21.9 for 1992 and 1991, respectively	15.3	19.6
	$225.0	$224.2

G. Debt

Due to Affiliates Within One Year

Prior to the Spin-off, the Company intends to settle in full from both the equity contributions and other funds provided by Telesis (see Note R) as well as from proceeds of the Offerings the amounts outstanding under the lending arrangements described below (see Note R). Accordingly, the majority of all borrowings from affiliates has been shown as short-term at December 31, 1992. Amounts due to affiliates within one year, $906.7 million and $507.8 million at December 31, 1992 and 1991, respectively, are primarily promissory notes bearing interest at the effective cost of capital for the lending affiliate, which averaged 5.7% during 1992 and 8.1% during 1991, and for which interest is payable weekly. Also included in this caption are accounts payable and accrued liabilities totalling $33.3 million and $9.9 million, at December 31, 1992 and 1991, respectively.

G. Debt (Continued)

Non-current Borrowings Due to Affiliates

Non-current borrowings due to affiliates are as follows (dollars in millions):

	December 31, 1992	December 31, 1991
Note payable to an affiliate relating to the CCI transaction, maturing January 31, 1997, interest at the effective cost of capital for the lending affiliate, which rate averaged 5.7% during 1992, interest payable semi-annually and principal due at maturity	$ 85.0	—
Note payable to an affiliate relating to the Teletrac transaction, $9.5 maturing December 20, 1995, $40.0 maturing January 31, 1996, interest at prime plus 3% with interest payable quarterly and principal due at maturity (Note E)	49.5	$ 49.5
Note payable to an affiliate, maturing September 25, 1993, interest at the effective cost of capital for the lending affiliate, which averaged 5.7% and 8.1% during 1992 and 1991, respectively, interest payable semi-annually and principal due at maturity	100.0	100.0
	234.5	149.5
Less portion due within one year	100.0	—
	$134.5	$149.5

Maturities of non-current borrowings due to affiliates are as follows (dollars in millions):

	December 31, 1992
Maturities:	
1993	—
1994	—
1995	$ 9.5
1996	40.0
1997	85.0
Thereafter	—
	$134.5

The Company's indebtedness to PacTel Capital Resources ("PTCR"), one of Telesis' financing subsidiaries, is expected to be substantially eliminated before completion of the Offerings (see Note R). Financing from PTCR will not be available after the Offerings. After the proceeds of the Offerings are invested, the Company will issue its own debt as needed. No assurances can be given that similar terms will be obtained.